## **ABSTRACT**

A method for analyzing defect information on a substrate, including logically dividing the substrate into zones, and detecting defects on the substrate to produce the defect information. The defect information from the substrate is analyzed on a zone by zone basis to produce defect level classifications for the defects within each zone. The zonal defect level classifications are analyzed according to at least one analysis method. The defect level classifications are preferably selected from a group of defect level classifications that is specified by a recipe. Preferably, the at least one analysis method includes at least one of zonal defect distribution, automatic defect classification, spatial signature analysis, and excursion detection. The defect level classifications preferably include at least one of individual defect, defect cluster, and spatial signature analysis signature. In one embodiment the defect information is logically divided into configurable zones after the defects on the substrate have been detected.

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